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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,930	01/22/2004	Mark D. Lauren	11418.0034	5741
26712	7590	11/29/2005	EXAMINER	
HODGSON RUSS LLP			DONAHOE, CASEY D	
ONE M & T PLAZA			ART UNIT	
SUITE 2000			PAPER NUMBER	
BUFFALO, NY 14203-2391			3732	

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/762,930

Applicant(s)

LAUREN, MARK D.

Examiner

Casey Donahoe

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-13 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/22/04 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the means of indicating the normal force applied to the bracket (claim 4) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 3, 5, 7-10, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Adam et al. (U.S. 5,711,665).

Regarding claim 1, Adam et al. disclose an orthodontic bracket (20) in Fig. 9, comprising a base; light curable adhesive (60); a body with an archwire slot and tie wings (30, 32); and a light emitting element (48) used to cure the adhesive that is integrally connected to the base in a detachable manner (column 8, lines 30-31) via tabs (52). The light emitting element (48) is contained in and outer end (46), which may also be detached from the tool housing (44) thus making the light emitting element integral with the bracket and separate from the power source (column 7, lines 32-45).

Regarding claim 2, the light emitting element may be a light emitting diode or electroluminescent devices (column 6, lines 34-44).

Regarding claims 3, 7, and 9, the housing (44) acts as a placement tool with means to mechanically grasp and locate (column 9, lines 9-13) as well as electrically

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engage the bracket via its integral connection with the light source located internally of the bracket. A method is, thus, disclosed whereby an integral connection is made between the bracket and the light source; light curable adhesive is placed on the rear of the bracket; the orthodontic bracket is placed on the surface of the tooth using the light source housing as a tool; and then electrically exciting the light source to cure the adhesive.

Regarding claim 5, the housing (44) may comprise optical fibers, which are flexible yet sufficiently stiff to retain a desired configuration for repositioning (column 9, lines 55-59). Thus, an adjustable angle is formed in the tool.

Regarding claim 8, the light source may be excited by an electrical power source in the tool, such as a rechargeable battery (column 6, lines 18-23).

Regarding claim 10, Adam et al. disclose a body (28) provided with optically curable adhesive (60), an electrically operated light source within the body (48), and an optical path (36) extending from the light source through the body.

Regarding claim 12, a method was earlier disclosed for providing a bracket, light curable adhesive, and an integral connection with an electrically operated light source; positioning the bracket on the tooth, and energizing the light source. Also, an optical path (36) was disclosed which inherently acts to transmit the light from the light source to the adhesive.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Adam et al. in view of Taub et al. (U.S. 6,334,772).

Adam et al. disclose a bracket and electrical positioning and curing tool as described above, but fail to disclose mirror or electronic video capabilities to assist with the bracket placement. Taub et al. disclose a tool for positioning and fixing orthodontic brackets in which a video camera is used to provide guidance information for positioning the bracket on the tooth's surface (see Abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the tool disclosed by Adam et al. to incorporate the video capabilities disclosed by Taub et al. in order to provide more accurate positioning of the orthodontic brackets so proper alignment can be achieved.

Claims 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adam et al. in view of Fischer et al. (U.S. 2004/0121280).

Regarding claim 11, Adam et al. disclose a tool for grasping, locating, and curing an adhesive-bearing bracket as described above but fail to specify the particular means for effecting the electrical connection between the light source and an external electrical power source. The means is interpreted from Applicant's disclosure to include an electrode connection made between surface pads 31, 32 and connections 37, 38. Fischer et al. disclose an equivalent electrical connection between the electrodes (32) and receptacles (34) in Fig. 3 of a dental light curing device with a detachable power supply. Such plug type electrical connections are well known in the art for creating completely detachable parts. Fischer et al. use such a detachable connection so that the light applicator may be separated from the power supply and sterilized by autoclaving. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the same electrode means to establish the detachable connection disclosed by Adam et al. Such a connection would provide a quick and easy way to detach the housing and power supply from the light source and provide an entirely separable connection that would allow the light applicator to be autoclaved. Autoclaving would protect the patient from cross-contamination, since the same applicator is used inside multiple patients' mouths.

Regarding claim 13, Adam et al disclose a light source, which is energized in response to generation means external to the bracket, being the power supply of the positioning tool.

Allowable Subject Matter

Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

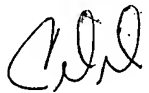
Jordan et al. (U.S. 6,482,002), Hare (U.S. 5,316,473), Morton (U.S. 5,791,350), Jabri (U.S. 6,290,495), and Stockstill (U.S. 6,682,344) are made of record.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Casey Donahoe whose telephone number is (571) 272-2812. The examiner can normally be reached on Monday - Thursday (7:30 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272 -4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


10/28/05

Casey Donahoe
Examiner
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